

# **BIG TANK LITTLE BRIDGE: IS THERE A POSITION ON THE PEACE OPERATIONS TEAM FOR HEAVY ARMOR?**

**A MONOGRAPH  
BY  
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Armor**



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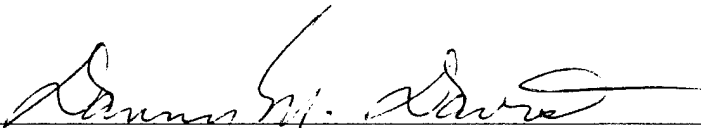
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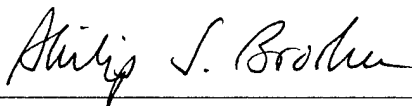
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## ABSTRACT

BIG TANK LITTLE BRIDGE: IS THERE A POSITION ON THE PEACE OPERATIONS TEAM FOR HEAVY ARMOR? MAJ Thomas S. James, Jr., USA, 45 pages.

The past decade has witnessed incredible change in the stability of the world. The end of the Cold War completely changed the international equation. The standard Soviet template no longer dominates the threat model. Based on the decreasing potential for conventional war, increasing probability for peace operations, and a shrinking defense budget; military and political leaders must invest in weapon systems capable of operating effectively in both environments. This monograph discusses the importance of including heavy armor in the peace operations force package.

The M1A1 tank provides the force commander with an increase in force protection and a psychological advantage over potential threats. Force protection is one of the most important considerations in peace operations. Heavy armor helps minimize the risk by providing a heavily armored platform which contains maximum force protection in any environment. Speed, mobility, potential firepower, and ability to function at night contribute to providing supporting fires for infantry forces in operations often involving urban terrain. An analysis of the Battle of Mogadishu, where the Quick Reaction Force attacked to relieve Task Force Ranger in the Bakara Market, and the mine clearing and lane proofing functions in Bosnia provides the foundation for this analysis.

Furthermore, these case studies illustrate the psychological impact armor has on stabilizing situations. The use of the First Armored Division in Bosnia to demonstrate United States resolve and the use of tanks by the 1<sup>st</sup> Marine Corps Tank Battalion (FWD) during Operation Restore Hope illustrate that the presence of armor can defuse potentially volatile situations without firing a shot.

The conclusion uncovers that heavy armor forces should own a position on the peace operations team. The heavily armored system provides force protection and psychological effect which is invaluable to mission accomplishment. In addition, if the situation escalates, the versatility of the tank provides the mission commander with a potent asset with which to respond. In an increasingly fluid and changing environment, having this capability in the commander's hip pocket could well be the difference between mission success and mission failure.

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## **Section I: Introduction**

In December of 1992, the First Armored Division (Old Ironsides) deployed from Germany to Southwest Asia as part of VII (US) Corps in support of Operation Desert Shield and Storm. The division played a major role in defeating the elite Republican Guard and forcing Iraqi forces out of Kuwait. Four years later, in December of 1996, Old Ironsides deployed again from Germany to Bosnia as a part of the Allied Rapid Reaction Corps in support of Operation Joint Endeavor. This deployment required the division to conduct a relatively new mission, peace operations, in support of the Dayton Peace Accords. This is a major illustration of the broad range of missions the United States Army faces today. When looking at the weapon systems deployed in support of both these operations one stands out: the versatility of the M1A1 Abrams Main Battle Tank. (Personal Observation)

The past decade has witnessed incredible change in the stability of the world.

The end of the Cold War has completely changed the international equation. The collapse of the Soviet Union - the disintegration of the internal as well as external empire, and the discrediting of communism as an ideology with global pretensions and influences - fundamentally altered the challenges ahead.<sup>1</sup> The standard Soviet style military force and doctrine no longer dominate the standard threat model. Potential threats are growing asymmetrically to the United States military organization. The potential for stability operations increases as the threat of conventional warfare decreases.

Over fifty years ago, at the end of World War II, the allies formed the United Nations (UN) to promote peace. The rivalry between the superpowers significantly restricted the UN's conflict resolution influence. Instead of a unified focus on international assistance, the UN became an arena for political debate and diplomatic mudslinging with military intervention confined to the aftermath of crisis.<sup>2</sup> The collapse

of this barrier generated new life in the UN's ability to actively participate in the global promotion of peace. Simultaneous to this, the demand for peacekeeping forces accelerated. For example, the UN participated in only 13 peacekeeping operations from its conception to 1988. Since 1988, there have been over 60,000 soldiers deployed, under UN control, in peacekeeping roles all over the world.<sup>3</sup>

The peace and security activities of the UN directly influence United States national interests. United Nations operations help developing democracies; lower the amount of refugees; reduce the likelihood of regional power involvement; and prevent small wars from escalating into major conflicts.<sup>4</sup> The United States must continue to play a part in these operations. In the document, *A Time For Peace*, President Clinton states "never has American leadership been more essential. American assets are unique: our military strength, our dynamic economy, our powerful ideals and, above all, our people. We can and we must make the difference through our engagement."<sup>5</sup> The paper goes on to outline three reasons why the United States must participate in peace operations. First, participation may be necessary to persuade others to join. Second, participation may enable the United States to exercise influence over an important UN mission. Third the United States may need to provide unique capabilities to operations that other countries cannot.<sup>6</sup> This leadership role is fundamental to the success of the UN. This change forces the United States Army to expand and diversify its future missions to include stability operations as well as conventional war.

In order to successfully participate in peace operations, the United States must understand this changing environment. This includes organized forces of intolerance and

destruction; terrorism; ethnic, religious and regional rivalries; the spread of organized crime and weapons of mass destruction; and drug trafficking.<sup>7</sup> Robert Kaplan developed a theory in his book, *The Ends of the Earth*, that ethnic clashes, environmental destruction, overpopulation, and disparity in wealth contribute to the deterioration of the nation state.<sup>8</sup> This unstable environment has the potential to produce unconventional threats to American interests and world order. The linear and dispersed battlefield of past conventional wars now take the shape of unconventional faction and clan violence. These factors influence the position the United States must take as the remaining super power when dealing with peace operations. The ability to manipulate conflict early may prevent conflict escalation to conventional or unconventional war.

Based on the changing environment, our National Security Strategy of engagement and enlargement and our stated support of the United Nations; peace operations will become common place in the doctrine of the United States Army. Many factors influence development of force structures necessary to accomplish the missions associated with these operations. This monograph focuses on determining the role heavy armor forces play in this structure. For the purpose of this paper, the term heavy armor refers to the M1A1 series main battle tank.

The monograph flows in the following manner. Section II sets the stage by outlining peace operations doctrine according to FM 100-5 *Operations*, FM 100-23 *Peace Operations*, and Joint Pub 3-07 *Military Operations Other Than War*. The focus is defining peace operations and the principles associated with execution. More



specifically, this section distinguishes between peacekeeping and peace enforcement when considering armor employment.

Section III establishes the historical perspective using case studies from Somalia and Bosnia to illustrate the effectiveness of armor systems in peace operations. The Somalia portion focuses on Operation Restore Hope and United Nations Operations in Somalia (UNOSOM II). The Bosnia portion focuses on Operation Joint Endeavor. These operations illustrate the key differences between peacekeeping and peace enforcement.

Section IV addresses the appropriateness of using heavy armor in peace operations. Armor employment provides force protection and psychological effect for the ground maneuver force. Heavy armor helps minimize risk by providing a heavily armored platform which provides maximum force protection for the crew. As an effective infantry support weapon, the tank can respond rapidly to unstable situations, placing a protected gun system in a position to provide supporting fires. The tanks mobility, protection and firepower contribute to this force protection equation. This section uses examples of how heavy tank employment could have assisted the Quick Reaction Force (QRF) relief of Task Force (TF) Ranger during the Battle of Mogadishu, in Somalia and how armor forces enhance force protection in Bosnia.

Additionally, this section focuses on the psychological effects of armor in peace operations. The reputation and intimidating factors associated with the M1A1 Abrams Tank enhances force protection. The shock effect produced by the presence of the heavy tank alone often diffuse a local belligerent situation all by itself. On the other hand, in

certain situations this could detract from peace operations by portraying excessive force and facilitating a corresponding escalation. Restraint verse force protection remains a key issue in force structure and employment.

Sustainment and maintenance also warrant consideration in heavy armor employment. Peace operations units often deploy with an austere logistics base. This ranges from a large Division Support Command (DISCOM) supporting TF Eagle in Bosnia to a small maintenance detachment maintaining the four M1A1 tanks of the Marine detachment in Somalia. The tank uses a considerable amount of fuel and requires a specialized support base during extended operations. The costs associated with these items weigh into the consideration to employ the armor force. The size and weight of heavy armor also dictates unique transportation requirements into and within the theater of operations.

Section V focuses on an analysis and conclusion based on the advantages and disadvantages of heavy armor in peace operations. This chapter emphasizes the importance of versatile equipment based on the changing nature of conflict and defense budget cuts. The United States military of the future must be able to fight conventional war and then turn around and conduct operations other than war. Based on force protection and psychological advantages, the tank deserves strong consideration in both these environments.

## **Section II: Peace Operations Doctrine**

The United States Army acknowledged the changing environment in the 1993 version of FM 100-5 *Operations*. Chapter 13 entitled Operations Other Than War

(OOTW), addresses the doctrinal foundation for conducting operations short of traditional war fighting. This section identifies the environment, principles and activities associated with OOTW. This monograph focuses on the peace operations portion of Operations Other Than War.

*Operations* states that the Army's primary focus is to fight and win the nations wars. However, Army forces and soldiers may have to operate around the world in an environment that may not involve combat. These missions include support to US, state and local governments, disaster relief, nation assistance, drug interdiction, peacekeeping, support for insurgencies and counterinsurgencies, noncombatant evacuation, and peace enforcement, just to name a few.<sup>9</sup> This commitment is consistent with the National Security Strategy of engagement and enlargement.

*Operations* outlines reasons for Army commitment in this new environment. Operations Other Than War promotes regional stability, maintains or achieves democratic end states, retains US influences and access abroad, provides humane assistance to distressed areas, protects US interests and assists civil authorities.<sup>10</sup> These reasons typically apply once the other elements of national power (diplomatic, economic, and informational) fail or establish a reasonable frame work for military commitment.

The Army narrowed the focus of OOTW doctrine when it published FM 100-23 *Peace Operations*. This manual, published in December 1994, provides the fundamental doctrinal framework for the full range of peace operations, to include support for diplomacy (peacemaking, peace building, and preventive diplomacy), peacekeeping, and peace enforcement.<sup>11</sup> The doctrinal explanation of operation types, variables, and

principles lay the foundation for this understanding. More specifically, the essential doctrinal understanding for this monograph revolves around the relationship between peacekeeping, peace enforcement, and war as it relates to the versatility of heavy armor employment.

### **Support To Diplomacy**

The first type of operation deals with support to diplomacy. These operations include peacemaking, peace building and preventive diplomacy. Peacemaking is a process of diplomacy, mediation, negotiation, or other forms of peaceful settlement that end disputes and resolve the issues that lead to conflict. Peace building consists of post conflict actions, primarily diplomatic, that strengthen and rebuild civil infrastructures, and institutions in order to avoid a return to conflict. Preventive diplomacy involves diplomatic action taken in advance of a predictable crisis to prevent or limit violence.<sup>12</sup> These operations occur before, during and after commitment of the military. This monograph will focus primarily on the military portion of the elements of national power deployed in support of peacekeeping and peace enforcement operations.

### **Peacekeeping**

Peacekeeping involves military and paramilitary operations conducted with the consent of all major belligerent parties. These operations focus on monitoring and facilitating implementation of an existing truce agreement and support diplomatic efforts to reach a long-term political settlement. Peacekeeping involves a high degree of consent, and forces must remain impartial. Military forces usually deploy under Chapter VI of the UN charter which covers peaceful settlements of disputes. Peacekeeping

operations include observation and monitoring of truces and cease-fires; reporting and monitoring; supervision; investigation of complaints and violations; negotiation and mediation; liaison; and supervision of truces.<sup>13</sup>

Observation and Monitoring of Truces and Cease-Fires. This activity requires military forces to observe, monitor, verify and report that parties involved in a conflict comply with agreements established in truces and cease-fires. Military forces typically execute these duties under an international agreement or mandate. Observers often deploy in an early warning role to report on a developing situation. These forces may also serve to deter aggression by reporting timely information about a potentially volatile situation.<sup>14</sup> The deployment of US troops as a part of a multi-national force on Operation Able Sentry in the Former Yugoslav Republic of Macedonia illustrate this peacekeeping activity.<sup>15</sup>

Reporting and Monitoring. This activity requires the reporting of accurate and timely information in an assigned sector of responsibility. Observers may report on the disengagement of belligerent parties and the interface between them. This activity involves observation only, no separation requirement.<sup>16</sup>

Supervision. This activity includes those tasks associated with observation and reporting compliance. They include:

- Cease-fire lines, borders, buffers, demilitarized zones, restricted areas, enclaves, and other geographic entities.
- Provisions of treaties, truces, cease-fires, arms control agreements, and other binding agreements.
- Exchange of prisoners of war, civilians, human remains, and territory.
- Refugee camps, collection points, and stations.
- Censuses, referendums, plebiscites, and elections.<sup>17</sup>

The initial activities of United Nations Protection Force (UNPROFOR) in the Former Republic of Yugoslavia illustrate these activities.<sup>18</sup> They monitored various enclaves and safe zones.

Investigation of Complaints and Violations. Observers may investigate complaints and alleged violations of the provisions of a specific agreement. Impartiality remains an important concept in these activities.<sup>19</sup>

Negotiation and Mediation. Observers may supervise negotiations and act as mediators on behalf of all parties involved in the conflict. Impartiality is critical and observers must be seen as part of the solution, not part of the problem.<sup>20</sup>

Liaison. An observation force may function as liaison officers with the mission of maintaining personal contact and exchanging information with parties involved. These parties may include belligerents, host nation, local civilians officials, international agencies, higher headquarters, and other military units.<sup>21</sup>

Supervision and Truces. Military units typically perform this activity. These forces deploy to a conflict area in order to permit diplomatic negotiation. These activities can only occur with the consent of the disputing parties. After reaching an agreement, truce supervisory forces may interpose between the disputing parties. This is normally a multinational operation and military forces deploy with the weapons necessary to accomplish the mission based on METT-T (mission, enemy, terrain, time and troops available). In certain situations, forces may provide a measure of law, order, and stability until civil authority can reestablish authority.<sup>22</sup>

## **Peace Enforcement**

Peace Enforcement is the application of military force or the threat of its use, normally pursuant to international authorization, to compel compliance with generally accepted resolutions and sanctions.<sup>23</sup> The purpose of these operations is to maintain or restore peace and support diplomatic efforts to reach a long-term political settlement. This includes the use of armed forces to separate combatants and to create a cease-fire that does not exist. Because of this requirement, a peace enforcement organization requires a full complement of military capability with the potential to exceed that of the belligerents.<sup>24</sup> Chapter VII of the UN Charter establishes the mandates for Peace Enforcement. Article 42 authorizes the use of force to restore international peace and security.<sup>25</sup>

*Peace Operations* identifies three key elements which apply to peace enforcement: phases, forces, and missions. The first phase of peace enforcement typically involves a rapid insertion of combat forces to establish a visible military presence. Subsequent phases focus on the development of civil authority. A detailed METT-T analysis determines the force package for deployment. This includes infantry, armor, artillery, engineer, and aviation assets. Peace enforcement missions include the restoration and maintenance of order and stability, protection of humanitarian assistance, guarantee and denial of movement, enforcement of sanctions, establishment and supervision of protected zones, forcible separation of belligerent parties, and other operations determined by the organization.<sup>26</sup>

Restoration and Maintenance of Order and Stability. Forces may deploy to restore order and stability within a state or region where there is a breakdown in competent civil authority. Forces assist in the maintenance of order and stability in areas where the loss of order threatens international stability or human rights violations persist.<sup>27</sup>

Protection of Humanitarian Assistance. Forces may deploy to protect humanitarian assistance organizations from hostile threats. These operations often include establishment of base areas (air and sea terminals), protect routes or corridors used for the transportation of relief supplies, and secure distribution sites.<sup>28</sup> An example of this mission occurred in August 1992 when the UN Security Council approved an increase in the strength of UNOSOM to four 750-man security units for the protection of humanitarian convoys and distribution centers throughout Somalia.<sup>29</sup>

Guarantee and Denial of Movement. These operations include the control of movement by air, land, or sea on particular routes. Army forces may employ a combination of armor, infantry, engineer, military police, and aviation units to accomplish this mission.<sup>30</sup> The establishment and monitoring of a zone of separation in Bosnia illustrates this activity.

Enforcement of Sanctions. Diplomacy typically defines and authorizes sanctions against a particular organization. Military missions include denial of supplies, diplomatic and trading privileges, and freedom of movement. Keys to success include consent from a group of nations, relate to supplies and facilities of the target only, and region wide cooperation. These operations typically include a joint war fighting



capability, a heavy weapons deterrent capability, and the ability to sustain protracted operations.<sup>31</sup>

Establishment and Supervision of Protected Zones. Diplomatic efforts may designate protected zones for belligerent forces or refugees. Land force missions include establishment, supervision and protection of these areas. Force structure must consider the threat and terrain involved. The protection of Kurdish refugees in northern Iraq illustrates this activity.<sup>32</sup>

Forcible Separation of Belligerents. This operation requires the physical separation of belligerents, with or without consent of one or more of the affected parties, in order to establish the conditions for peace. This separation is the ultimate means to counter a serious threat to peace and security and is used as a last resort. This mission may require the reduction or partial elimination of a particular factions combat capability. Combat units make up the majority of force structure and in certain situations the threat of force alone accomplishes the mission. Key command considerations involved in these operations include sufficient forces, antagonisms between belligerents, enemy weapons capabilities, civilian population relation to the belligerent parties, and mandate guidelines. The end state must focus on disengagement not destruction of the belligerents.<sup>33</sup>

In order to fully understand Armor employment in peace operations requires a clear distinction between peacekeeping and peace enforcement. These operations have significant differences based on three variables: consent, force, and impartiality. A force conducting peacekeeping may not have sufficient combat power to conduct peace

enforcement, and forces which conduct peace enforcement may prove unacceptable for peacekeeping based on belligerent party perceptions. Consent is the acceptance of the peace operations force by the belligerent parties. In peace enforcement this consent may be nonexistent or unclear. Force represents the make up of peace operations units. This includes troops, weapon systems and rules of engagement. In peacekeeping, force represents self-defense or actions based on a mandate. In peace enforcement, units may use force to compel or coerce. Impartiality is the military forces' ability to remain impartial in the eyes of the belligerent parties. Based on the nature of the operation, peacekeeping forces have an easier time remaining impartial based on the level of force required.<sup>34</sup>

An analysis of the variables discussed above determine the nature of peace operations and military force mix. Successful operations link the ability to execute peace missions while maintaining a balance between these variables. This monograph illustrates the heavy armor contribution to maintaining this balance.

### **Operations Other Than War Principles**

*Peace Operations*, nested with FM 100-5 *Operations* and Joint Pub 3-07 *Military Operations Other Than War*, defines six principles which influence peace operations: objective, unity of effort, security, restraint, perseverance, and legitimacy. These principles, in addition to the principles of war, provide a valuable analytical tool in planning and executing peace operations.

Objective. "Direct every military operation toward a clearly defined, decisive, and attainable objective."<sup>35</sup> Objective in peace operations deals with a mandate, terms of

reference (TOR), and end state. The mandate expresses the political objective, international support, and the desired end state. The terms of reference come from the mandate and define rules of engagement, force protection, geographical limitations, duration, relations with belligerent parties, relations with Non-government Organizations (NGOs) or Private Volunteer Organizations (PVOs), and resources. The end state defines what conditions look like at the conclusion of the operation.<sup>36</sup>

Unity of Effort. “Seek unity of effort in every operation.”<sup>37</sup> Unity of effort refers to directing all operations to a common purpose. This principle starts with a clearly identifiable objective and TOR from the mandate. This becomes a considerable challenge when dealing with multinational forces with different political objectives and NGO/PVOs outside the chain of command. The United Nations plays a large role in unity of effort.<sup>38</sup>

Security. “Never permit hostile factions to acquire an unexpected advantage.”<sup>39</sup> Security in peace operations includes force protection as a dynamic of combat power against any civilian, terrorist, or faction organization. This principle emphasizes sufficient combat power based on a detailed analysis of potential threat capabilities. A balance of the variables discussed earlier and sufficient show of force greatly enhance the security principle.<sup>40</sup>

Restraint. “Apply appropriate military capability prudently.”<sup>41</sup> One of the tools used to identify restraint is the rules of engagement. This document spells out the use of force and what is appropriate for given situations. The object is not to damage legitimacy with excessive force for a particular situation. This principle is important

without damaging the right of self defense and having sufficient combat power to accomplish the mission.<sup>42</sup>

Perseverance. "Prepare for the measured, sustained application of military capability in support of strategic aims."<sup>43</sup> This principle focuses on preparing and executing sustained operations for the period of time required to accomplish the mission. The objective and end state help define these requirements prior to and during deployment.<sup>44</sup>

Legitimacy. "Sustain the willing acceptance by the people of the right of the government to govern or a group or agency to make and carry out decisions. Legitimacy is a condition growing from the perception of a specific audience of the legality, morality, and correctness of a set of actions."<sup>45</sup> A multinational force structure adds to the legitimacy of an operation. This includes a balance between geographic, political, and force composition.<sup>46</sup>

This section distinguished the difference between peacekeeping and peace enforcement, and the variables considered when developing a force structure to conduct these operations. The key consideration when planning and executing these missions deals with security and force protection. Peacekeeping forces must have the capability to transition to peace enforcement if the situation deteriorates. The OOTW principles, in addition to the principles of war, also provide guidance in planning and execution. These definitions provide a foundation for analyzing the peace operations in Somalia and Bosnia as it relates to heavy armor employment.

### **Section III: Historical Perspective**

The purpose of this section is to outline the historical background and define the environment which influenced peace operations in Somalia and Bosnia. This will form the background for analyzing the use of heavy armor forces in these two distinctively different environments.

#### **Somalia**

The geography of Somalia posed unique difficulties for peace operations forces. Located on the northeastern coast of Africa, the area is approximately 250 million square miles, comparable to the New England states. The geographic location posed deployment problems because of a 24 hour flight or three week cruise time from the United States. The desert climate also strained operations. Heat, dry conditions, and sparse vegetation are common place throughout the area. Drought conditions over the past decade produced severe food shortages. These conditions, geography, weather, and famine, placed a severe strain on mission accomplishment and logistics support for the peace operation.<sup>47</sup>

Lines of communications also placed restrictions on operations. Somalia contains approximately 2,600 kilometers of paved road between Mogadishu, Merca, Kismayo, and Berbera. These roads are generally in poor condition and most interior networks are dirt roads. Mogadishu, the capital city, contains the main airport. All other airfields are primitive with poor equipment and dirt covered runways. Somalia has an extensive coast line with underdeveloped port facilities in Mogadishu, Kismayo, and Berbera. Civil unrest prohibit the upkeep of these facilities. Somalia also has no functioning telephone

system throughout the country. Lack of mobility, infrastructure, and communications made peace operations and humanitarian assistance extremely difficult.<sup>48</sup>

The political situation in Somalia created an unstable environment. Since 1988, the country had experienced civil war creating an unstable environment between the numerous clans and factions. Clan members are extremely loyal and form temporary alliances to facilitate self interests. Typical clan members are aggressive, willing to accept casualties, and treat women and children as a part of the order of battle. Compounding the problem, Somalia was a cold war focal point for years. The government accumulated a large quantity of individual and heavy weapons. During the civil war, these weapons found their way into the hands of the various clan armies. In 1991, the Siad Barre regime collapsed and the political situation further deteriorated. Clan warfare, banditry, and the drought magnified the already existing famine which resulted in over 500,000 deaths.<sup>49</sup> These events, through the media, painted a captivating picture throughout the international community.

The United States involvement passed through three stages: Operation Provide Relief, a humanitarian assistance mission; Operation Restore Hope, humanitarian assistance and limited military action; and UNOSOM II, a peace enforcement mission involving active combat. Throughout these operations two basic problems persisted: moving sufficient food, water and medical supplies into the country, and providing security to protect relief supplies from theft by bandits or confiscation by the clans and warring factions.<sup>50</sup>

“In April 1992, the UN Security Council approved Resolution 751, establishing the United Nations Operations in Somalia (UNOSOM) whose mission was to provide humanitarian aid and facilitate the end of hostilities in Somalia.”<sup>51</sup> The 50 UNOSOM observers failed to make a difference in ending hostilities or securing relief supplies. In July, the United Nations requested additional assistance. The Bush Administration responded by ordering U.S. forces to support Operation Provide Relief from 15 August 1992 through December 1992.<sup>52</sup>

United States Central Command (CENTCOM) received the mission which was to provide military assistance in support of emergency humanitarian relief to Kenya and Somalia. The main objectives included:

- Deploy a Humanitarian Assistance Survey Team (HAST) to assess relief requirements in Somalia
- Activate a Joint Task Force to conduct an emergency airlift of food and supplies into Somalia
- Deploy (4) C-141 aircraft and (8) C-130 aircraft to Mombasa and Wajir, Kenya to provide daily relief sorties into Somalia<sup>53</sup>

During this 6 month operation, a daily average of 20 sorties delivered approximately 150 metric tons of supplies which totaled more than 28,000 metric tons of critical supplies by missions end.<sup>54</sup>

Despite the success of these relief efforts, the security situation continued to deteriorate. In November, a ship carrying badly needed relief supplies, received fire from belligerents in Mogadishu harbor, forcing its withdrawal. These actions and the overall security situation concerned the international community, to include the United States. On 4 December 1992, President Bush initiated Operation Restore Hope. Under the terms of UN Resolution 794, the United States would lead and provide military forces to a

multinational coalition known as the United Task Force (UNITAF). This force would stabilize the situation then pass it off to a UN peacekeeping force. The UN mandate established two important missions: to provide humanitarian assistance to the Somali people, and to restore order in southern Somalia.<sup>55</sup> The mandate specifically referenced Chapter VII (Peace Enforcement) of the UN Charter due to the possible requirement of force in establishing a secure environment for distribution of relief supplies.<sup>56</sup>

The CENTCOM mission statement specified these objectives and clearly spelled out the essential tasks for peace operations forces.

When directed by the National Command Authority (NCA), USCINCENT will conduct joint/combined military operations in Somalia to secure the major air and sea ports, key installations and food distribution points, to provide open and free passage of relief supplies, provide security for convoys and relief organization operations, and assist UN/NGOs in providing humanitarian relief under UN auspices. Upon establishing a secure environment for uninterrupted relief operations, USCINCENT terminates and transfers relief operations to UN peacekeeping forces.<sup>57</sup>

UNITAF conducted these operations from 9 December 1992 to 4 May 1993 and involved more than 38,000 troops from 21 coalition nations, including 28,000 Americans. The operation was successful in stabilizing the security situation, and confiscating crew served weapons and other vehicles.<sup>58</sup> The secure environment allowed safe passage of relief supplies to a large portion of the starving population.

As stated above, Operation Restore Hope's end state was to establish "a secure environment for uninterrupted relief operations" and then to hand off the maintenance of the environment to a UN peacekeeping force. The first three phases of the operation, which included deployment of forces and the establishment of local and expanded



security seemed to go well. However, United Task Force (UNITAF) soon discovered that the term “secure environment” did not have a universal agreed upon mark on the wall.<sup>59</sup>

UN Secretary General Boutros-Ghali urged the operation to continue until US forces could effectively disarm the bandits and clan factions that continued operations in Somalia. These issues initially deferred the transition but on 26 March 1993, the UN published Security Council Resolution 814 which established UNOSOM II.<sup>60</sup> The transition began on 18 February 93 and ended on 4 May 1993.<sup>61</sup> This resolution produced several significant directives which impacted on the organization’s ability to conduct peace operations:

- The council mandated the first ever UN directed peacekeeping operation under Chapter VII enforcement provisions of the Charter, including the requirement for UNOSOM II to disarm Somali clans.
- The council explicitly endorsed the objective of rehabilitating the political situation and economy of a member state.
- The council called for building a secure environment throughout the country, including the northern region that had declared its independence.<sup>62</sup>

These objectives expanded the fairly limited mandate of UNITAF and UNOSOM I. A full UN peacekeeping structure controlled the operation. Retired US Navy Admiral Jonathan Howe, Special Representative of the Secretary General, and Turkish Lieutenant General Cevik Bir, UN multinational force commander, headed up the organization.<sup>63</sup>

The US primarily provided logistics support for the operation with over 3,000 personnel and a Quick Reaction Force consisting of 1,150 soldiers from the 10<sup>th</sup> Mountain Division. The QRF operated under the control of the Commander US Forces Somalia, and supported UNOSOM II from 4 MAY 1993 to 31 March 1994. Their mission was: “When directed, UNOSOM II Force Command conducts military

operations to consolidate, expand, and maintain a secure environment for the advancement of humanitarian aid, economic assistance, and political reconciliation in Somalia.”<sup>64</sup>

The aggressive UN mandate and the continued presence of multinational forces ultimately threatened the power base of Mohammed Aideed, a powerful Mogadishu clan warlord. These tensions exploded when Aideed supporters ambushed the Pakistani relief convoy on 5 June 1993, resulting in 24 Pakistani soldiers killed and more than 50 wounded. The convoy was delivering relief supplies and 12 of the soldiers were unloading food, at a feeding station, at the time of the attack. Reports indicate that the militia used civilians as shields when firing on the convoy.<sup>65</sup> This ambush changed the nature of UNOSOM II operations.

The incident intensified the situation calling for compliance with established cease fire and disarmament agreements, and accelerated the need for UNOSOM II forces on the ground. The UN Secretary-General also urged a complete investigation into the incident specifically the involvement of Aideed. On 11 June, UNOSOM forces initiated actions to restore peace in Mogadishu. This included removal of Mogadishu radio control by the Somali National Alliance (Aideed supporters) and destruction of three major weapon and equipment storage sites.<sup>66</sup>

Additionally, this sparked the UN to publish Security Council Resolution 837 which called for immediate apprehension of those responsible. This resolution resulted in US forces employed on a manhunt for Aideed. After a series of engagements involving a US Ranger Task Force, a major fight broke out on 3 October 1993, resulting

in American casualties which included 18 killed and 75 wounded. This was the bloodiest battle of any UN peacekeeping operation to date.<sup>67</sup> The QRF, comprised of light infantry and helicopters, executed operations to relieve TF Ranger during the battle on 3 - 4 October 1993. The QRF proved inadequate as a relief force during this battle. Their light forces were extremely vulnerable to ambush fires when moving in trucks and high-mobility, multipurpose, wheeled vehicles (HMMWVs) and when dismounted, they lacked a protected heavy weapon system to provide suppressive fires.

The Pakistani and QRF actions illustrated the need for heavy armor in Somalia. During the Pakistani and QRF ambush, heavy armor would have provided a protected platform to place between the ambush fires and relief convoy which only contained trucks. Based on civilian involvement, the tank could have sustained direct fire hits without having to return fire and possibly diffused the situation. Additionally, the presence of the tank may have created shock effect and prevented the situation all together.

The JTF eventually discovered that the QRF lacked sufficient heavy armor forces based on the rocket propelled grenade (RPG) and machine gun threat. On 8 October 1993, a heavy force (tanks, Bradleys, and artillery) deployed in support of QRF operations.<sup>68</sup>

These operations in Somalia illustrate the importance of a versatile force structure capable of transitioning to combat actions. The mission of US forces fluctuated from peacekeeping to peace enforcement throughout employment in Somalia. During this

time, the force structure did not always coincide with the mission nor contain sufficient combat power to ensure force protection against the potential threat.

### **Bosnia**

The focus of this case study is an analysis of the American portion of TF EAGLE in support of Operation Joint Endeavor. This includes an analysis of the terrain, weather, potential threat, force organization and mission. As it unfolds, the significant differences when compared to Somalia will help illustrate heavy armor impact on peace operations.

Fundamental to armor operations in the Former Republic of Yugoslavia is a complete understanding of terrain and road network which traverse the country. Mountains and hills dominate the country with elevations as high as 2,900 meters above sea level. The highway system contains asphalt surfaced roads and numerous bridges, which traverse rough terrain. By 1989, the highway system totaled 123,000 kilometers of roads. This included 871 km of major highway (Route 1), 73,527 km of asphalt-surfaced roads, 33,663 km of macadam-surfaced road, and 15,133 km of earthen roads.<sup>69</sup> Mines and blown bridges litter many of these routes.

The former Yugoslavia contains three land form divisions: the northern plains, the interior highlands, and the Adriatic coastal region. The northern plains total roughly 20 percent of the land area and comprise the river valleys of the middle and lower Drava, the lower and middle Sava, the lower Tisa, and the middle Danube. This area borders the south and west interior highlands and continues north into Hungary and Romania. Vehicle movement is feasible most of the year. The mountains of the interior highlands consists of steep hills and rough karst topography which profoundly effect military

operations. Cross country movement is virtually impossible for track and wheeled vehicles. Vehicular movement, in general, is much easier during the summer and autumn than in the winter and early spring.<sup>70</sup>

The Dayton Accords in late November 1995, produced a General Framework Agreement for Peace (GFAP). The Former Warring Factions signed the agreement on 14 December 1995 in Paris. The mission to implement the GFAP fell under NATO, which authorized the first ground operation in its history and the largest military operation in Europe since World War II. The United States committed the First Armored Division as the base for the "Multinational Division North," one of the three multinational divisions which comprised the Implementing Force (IFOR), under the command and control of the NATO Allied Rapid Reaction Corps (ARRC).<sup>71</sup>

The primary tasks, specified in the GFAP agreement which IFOR was to perform once deployed into the area of operation, included the following:

- cessation of hostilities between the Former Warring Factions (FWF)
- insurance of cooperation between the FWF
- separation of the FWF by ensuring withdrawal - NLT D+30 - from a zone of separation snaking over 1,000 miles of confrontation line in Bosnia Herzegovina
- insurance of freedom of movement in the territory of Bosnia-Herzegovina
- supervision of the transition of control between the elements of the FWF in designated areas of transfer by D+90
- observance of the status of forces (demilitarization, weapons stockpiles, training) throughout Bosnia-Herzegovina<sup>72</sup>

Task Force Eagle accomplished these tasks with the following task organization: 2 (US) maneuver brigades with M1A1 tanks, M2/M3 Bradley fighting vehicles and associated

artillery; a Swedish battalion with Leopard 1A3 tanks and Swedish APCs; a Russian Airborne Brigade with BTR-80s and BMD-2s; and a Turkish battalion.<sup>73</sup>

The threat which faced Task Force Eagle differed significantly from the threat in Somalia. The forces in Bosnia were more conventional based on the organization of the Serbian, Croatian, and Muslim armies. The environment also remained unstable based on the previous years of fighting and access to Soviet made heavy armor and artillery. Although these organizations signed the Dayton Peace Agreement, the potential for intense combat still existed.

### **Comparison**

The operations in Somalia and Bosnia differed based on mission, force structure, terrain and potential threat. All three of these differences affect the employment of heavy armor and the lessons are helpful in determining future force structures in peace operations.

Based on the doctrinal discussion in Section II, the operations in Somalia started as a peacekeeping mission. Operation Provide Relief focused on humanitarian assistance and monitoring the situation. As the mission grew into Restore Hope and UNOSOM II, the mission demanded more peace enforcement activities to include disarming belligerents and the man hunt for Aideed. Unfortunately, the forces available did not remain consistent with potential threat growth.

In other words, there was a failure to anticipate the Aideed militia reaction to the man hunt. On 3 and 4 October 1993, TF Ranger's attempt to detain several Aideed officials in the Bakara Market sparked intense resistance from the guerrilla fighters.<sup>74</sup>

When the QRF responded, they ran into several deliberate ambushes emplaced by this force. The QRF task organization was armor deficient. Armor forces could have maneuvered into position to provide effective supporting fires for infantry forces maneuvering to relieve the Rangers.

In Bosnia, the IFOR operation contained peacekeeping missions with the potential for escalation to peace enforcement based on a potential for resistance to zone of separation establishment. This potential for escalation influenced the selection of a heavy armored division to make up Task Force Eagle. The heavy force displayed the United States commitment to mission accomplishment. This organization gave the ground force commander the option of conducting operations other than war or quickly transitioning to conventional war. The threat of this action alone contributed to the peaceful outcome.

The arid and open terrain of Somalia differed from the mountainous and rugged terrain of Bosnia. Mobility proved less restrictive in Africa. In Bosnia, the terrain often restricted combat vehicles to roads where they were vulnerable to mines and blown bridges. The primitive Somali infrastructure placed less restriction on urban operations compared to a more developed Bosnia. Section IV covers a detailed analysis of these effects on maneuver.

The potential threat also differed based on organization, weapons, and tactics. In Somalia, the clans posed a predominantly dismounted threat with machine guns and hand held anti-tank weapons. These forces resorted to guerrilla style tactics. On the other

hand, the Serbs, Croats and Bosnian Muslims maintained a more conventional threat with tanks, personnel carriers, and artillery pieces.

#### **Section IV: Heavy Armor Implications in Peace Operations**

The purpose of this section is to outline the capabilities and limitations of heavy armor in the peace operations environment. The methodology includes an analysis of peace operations doctrine, force protection, psychological effect, and sustainment and maintenance.

#### **Armor Peace Operations Doctrine**

Peace operations doctrine has improved significantly over the past five years. The 7<sup>th</sup> Army Training Command, in Germany, contributed to these doctrinal improvements based on the potential for deploying forces from Europe to Bosnia. Soldiers at the Combat Maneuver Training Center (CMTC) developed a Mission Training Plan (MTP) for units designated for deployment on peace operations. This document emphasized the importance of infantry forces in this environment, but also emphasized the importance of combined arms operations especially heavy armor in support of these forces.

The manual illustrates the importance of heavy armor as a force protection multiplier. The MTP identifies critical tasks associated with peace operations at the battalion/task force and company/team level. These tasks include convoy escort, route and area security, urban area operations and zone of separation operations. The heavy tank contributes speed, protection, potential firepower, and shock effect to the combined arms force when conducting these tasks.<sup>75</sup>



During maneuver training at the Combat Maneuver Training Center (CMTC), the First Armored Division identified key advantages to armor in this new environment. These observations included the following: tanks can be rapidly emplaced at decisive points throughout the area of operation to support threatened forces with potential combat power and heavy forces have extremely high visibility and can deter aggression by belligerent forces by their presence alone (shock effect)<sup>76</sup> These insights are summed up into two distinct categories: force protection and psychological effect.

In fairness, the CALL article, *Operations Other Than War, Peace Operations* identifies two disadvantages associated with heavy armor in peace operations. First, the enemy can focus on, isolate, and destroy armor forces in a piecemeal fashion. This vulnerability reinforces the importance of task organizing tanks with infantry when operating in restricted terrain. Secondly, tank movement has a tendency to damage infrastructure.<sup>77</sup> Maneuver damage becomes a key consideration when selecting movement routes and tank placement within the area of operation.

Furthermore, urbanized terrain often dominates the peace operations environment. If armor forces are to be useful to our National Security in the future, they must be able to conduct Military Operations in Urban Terrain (MOUT). This is an infantry heavy mission, but armor support enhances force protection and mission accomplishment.

Firepower enhances the tanks effectiveness in MOUT. The M1A1 tank is an effective weapon for heavy fires against structures. The HEAT round, fired perpendicular to masonry, impacts creating enough spall to inflict casualties inside the

structure. This round has a minimum arming range of about 30 feet, creating the need for stand off.<sup>78</sup> As discussed earlier, the organic machine guns and large ammunition basic loads provide an incredible amount of firepower for suppressing enemy targets in support of dismounted infantry. Additionally, the armor protection allows the tank to achieve a positional advantage, under fire, to deliver supporting fires. These characteristics make the M1A1 tank a force multiplier in MOUT.

### **Force Protection**

Force protection is one of the most important considerations in peace operations. The American people will not support military employment, especially in stability operations, if the risk of casualties is too high. Heavy armor helps minimize this risk by providing a heavily armored platform which allows maximum force protection in any environment ranging from peace to conventional war. The tank's armor, though a key component, is not the only consideration for protection. Its brute strength, speed, mobility, firepower, and the night optics also contribute to protecting the force.

During Operation Restore Hope in Somalia, the Marine Corps 1<sup>st</sup> Tank Battalion (FWD) frequently used the M1A1 tank to provide force protection. During operations in and around Mogadishu, the Marines used a combination of grappling hooks, cables, and the tank's engine power to drag debris from the road and clear convoy routes. The Marines also modified the front slope of the tank with a chained railroad tie, creating a bumper, and used it to ram roadblocks.<sup>79</sup> The tank was also the only vehicle with firepower that could force a breach through a walled compound or a burning barricade.

The tank's speed, mobility, and armament contributed to mission success in several ways. In addition to crew protection, the tank provided an effective quick reaction platform. The 67 ton tank reaches speeds in excess of 45 miles per hour with the capability of 0 to 32 kilometers per hour in 6.8 seconds. Additionally the tank can reach speeds in excess of 25 miles per hour in reverse gear (fastest track vehicle in the United States inventory).<sup>80</sup> These speeds, coupled with an off road capability, allowed the Marines to react quickly to belligerent situations. It also provided the force a quick displacement capability when avoiding barricades or displacing from untenable situations. In fact, during operations in Mogadishu, the Marines used the tank's speed, mobility, and armament successfully without having to rely on its main gun against threat targets. They were able to react quickly to belligerent crowd gatherings and disperse them by presence alone. Firing the main gun in the air reinforced this technique when required.<sup>81</sup>

The tank's state of the art night observation and acquisition capability provided a distinct advantage during hours of darkness. This augmented the Marines' ability to move and observe the streets of Mogadishu at night with no external light source and allowed observation of belligerent forces while avoiding detection. Night observation capability also contributed to securing hard site areas during hours of limited visibility and identifying thermal signatures (i.e. snipers) around windows in buildings.<sup>82</sup>

The events of 3 and 4 October 1993 in Mogadishu, Somalia illustrate the need for heavy armor in peace operations. On 3 October 1993, Task Force Ranger which consisted of a company of Rangers, a contingent of attack and assault helicopters, and

other elements conducted a raid into an enemy stronghold (Bakara Market) to capture several key members of Mohamed Aideed's militia.<sup>83</sup> General Aideed's clan of over 2000 guerrilla fighters controlled the stronghold. During this mission, the militia shot down two extraction aircraft and surrounded TF Ranger near the first downed aircraft.<sup>84</sup> These events escalated the situation and triggered the alert and rapid employment of the Quick Reaction Force.

The Falcon Brigade of the 10<sup>th</sup> (US) Mountain Division constituted the majority of the QRF which consisted of one light infantry battalion, one attack/assault helicopter battalion, and a brigade headquarters. Their mission, was to attack to breakthrough and link-up with the besieged Rangers at the northern crash site in order to recover all American casualties and remains.<sup>85</sup>

Threat forces facing the Rangers and QRF consisted of Aideed guerrilla fighters armed with a mixture of Soviet block and NATO made assault rifles, machine guns, RPG-7's, mines and demolitions. These fighters had the reputation of being aggressive and bold, even under intense fire. They often operated in team and squad size elements coordinating the movement and employment of larger elements. An extensive human intelligence system camouflaged by the local populace, provided essential information to the guerrilla force. This information allowed the establishment of hasty road blocks to slow military force movement and set the conditions for anti-personnel and armor ambushes.<sup>86</sup>

Two battlefield conditions further complicated the situation for the QRF. The majority of the relief mission took place during hours of darkness and in urban terrain.

This favored the guerrilla style tactics of Aideed's forces, allowing maximum cover and concealment. The urban setting enhanced the ability to block roads at various choke points, facilitating ambushes.

The first QRF attempt to relieve the Rangers took place at 1645 hours when an infantry company of TF 2-14 departed from the Mogadishu Airfield using HMMWVs and trucks enroute to the downed aircraft site. The convoy ran into a deliberate ambush approximately one kilometer into the movement, resulting in two HMMWV's destroyed, 3 friendly KIA and 4 WIA. The ambush divided the QRF force resulting in a loss of command and control. Concurrently, fragmented elements of the company were hit by additional deliberate ambushes forcing the QRF to retreat back to the airfield.<sup>87</sup>

This was a prime example of a need for heavy armor. An M1A1 tank platoon in support of this infantry company, could have provided the mobility necessary to bypass or possibly ram through the road barriers, limiting force exposure to ambush fires. The armor protection could have limited the crew exposure to machine gun and RPG fire and the armament could have provided concentrated fires to destroy or suppress enemy forces in order to allow infantry forces to breach or continue the attack. An armor platoon, split into sections with one in the lead and one in trail, could have provided the initial protection needed to expedite a breach and get the attacking column out of the ambush engagement area.

Realizing that TF 2-14 had insufficient armor protection and that every second counted for TF Ranger, the Falcon Brigade formed an ad hoc task force consisting of two light infantry rifle companies, a composite platoon of Rangers, two Malaysian

mechanized companies, and one Pakistani tank (M48-5) platoon. An aerial task force consisting of elements of TF 2-25 AVN and special operations aircraft supported the ground force.<sup>88</sup>

At 2300 the TF David (QRF TF - named after the commander), attacked for the second time in an attempt to relieve TF Ranger. During this move, the light infantry mounted on white Malaysian Condor armored personnel carriers for force protection. Unfortunately, the problems with organizing a combined arms force below battalion level became apparent. The language barrier and intent of the Malaysians and Pakistani forces created problems for TF David. The Executive Officer for A/2-14 IN (Lieutenant Ferry) stated, "Both the Malaysians and Pakistanis had American liaisons with them, but the liaison officers did not seem able to really influence what their unit would do. It seemed the tank commander had been ordered to go only about half way to the objective."<sup>89</sup> These command and control problems continued when the Malaysian and Pakistani elements refused, on several occasions, to move under fire, push through road barriers, and stay on designated routes. Lieutenant Ferry summarizes the combat operations, as follows:

The Pakistani tank platoon was now nowhere in sight, and I didn't see them again until the next morning (apparently, they had been ordered to go only so far on National Street and not to advance any further... [Also], the [US] platoon leader had been unable to get his Malaysian driver either to make the correct turn or stop. The two lead APCs continued down National Street past the intersection where the company was suppose to turn north and continued out of sight. The element was now separated from the company and out of communications, and we would not hear from them again until early on the morning of the fourth.<sup>90</sup>

Compounding the problem, was the fact that the light infantry companies were riding in the back of the Malaysian APCs. This timidity and lack of control placed the entire force in danger especially in ambush engagement areas.

Task Force David fought a three hour battle before finally linking up with TF Ranger at the first downed aircraft location. During this time, TF Ranger had difficulty recovering one of the pilots wedged in the aircraft. This created delays in displacement. During the delay the TF received intense enemy rocket and machine gun fire. Accounts estimate over 100 RPGs were fired during this period. Task Force Ranger recovered the wedged pilot at 0537 hours and both TFs moved back along secured routes to base camps.<sup>91</sup>

The Battle of Mogadishu was the most vicious, lethal engagement involving U.S. light forces since the Vietnam War. During this 12 hours of intense combat TF David received 2 KIA and 21 WIA.<sup>92</sup> As stated earlier, the consolidated figure, with the addition of TF Ranger, totaled 18 KIA and 75 WIA.

Looking back on the events of the Battle for Mogadishu it is clear that force protection issues, based on the task organization, contributed to delays in the QRF reaction time. This delay left TF Ranger exposed for a greater period of time. The problems encountered, were directly influenced by a lack of heavy armor in the QRF organization. The M1A1 tank could have provided increased mobility, protection, firepower, and communications, all of which contributes to force protection. In this situation, a tank company task organized by platoon to each infantry company, then

further task organized by section, would have significantly enhanced force protection for TF David.

Upon notification of movement, a tank section could have led the infantry companies along attack routes, thus placing an extremely survivable, heavily armed, armor platform at the front of the formation. Upon, reaching the barricade, the tank could have rammed through the obstacle or laid down a base of fire to support infantry and engineer breaching. The tanks ability to withstand mine detonation would have enhanced it's effectiveness as a lead vehicle as well. This capability would have allowed the tank to proof roads and barricades for mines prior to committing a more vulnerable force. Grenade launchers on either side of the turret, capable of launching 12 smoke or high explosive (HE) grenades in a arc approximately 100 meters forward of the turret, could have also provided excellent concealment from enemy direct fire.

Additionally, the tanks ability to withstand machine gun and light anti-tank fire could have allowed it to achieve a positional advantage for delivering suppressive fire. The volume of fire during the Battle of Mogadishu created a condition which was unsuitable for light skin trucks, armor personnel carriers, and M48-5 tanks. The RPG-7 would have little problem destroying or disabling these vehicles at close range with a direct hit, but not the M1A1. TF David's most powerful weapon, for suppressing buildings, was the MK-19 40mm grenade launcher mounted on a HMMWV. Although this weapon system created the desired effect, the platform was extremely vulnerable to direct fire. The M1A1 armor protection would have provided a larger survivability rate against these enemy weapons and provided a comparable building suppresser.



Two additional considerations include night fighting capability and command and control. The driver's thermal sight and gunner/tank commander's thermal imaging system would have provided an effective night detection and acquisition capability. These sights would have allowed the crew to detect heat sources around windows and other locations within the urban environment. This night capability was non-existent on the M48-5 and Condor APCs. No doubt, the advanced communications equipment and elimination of language barriers provided by a U.S. armor unit, would have enhanced the effectiveness of command and control.

General Montgomery, the Deputy Commander of UN Operations in Somalia and QRF Commander, emphasized this point during his congressional testimony concerning the events of 3 and 4 October 1993, stating:

It [the QRF] had the four Pakistani M48-5 tanks. You will recall I said they were rather old tanks. They had no night vision capabilities, nor did the Malaysian vehicles. So in the middle of the night there were some limitations... The tanks still had some shock effect, I think, and the ability to negotiate some smaller roadblocks and the like. But clearly, nothing like the capability of the M1A1 tank.<sup>93</sup>

The Pakistani tanks provided protection against small arms fire but maintained a limited capability against anti-tank threats, large road barriers, and vehicle mounted night vision devices were nonexistent. These limitations delayed QRF reaction time when relieving TF Ranger. General Montgomery reinforces this point stating:

It is of my opinion, that had it [M1A1 tank] been available, it would have been invulnerable to rocket-propelled grenade fire of the type used by the militia, and Bradley Fighting vehicles (BFV) would have been less vulnerable than the Malaysian vehicles. This force would have significantly increased firepower and speed.<sup>94</sup>

The conditions created by the tension in Mogadishu warranted heavy forces in the QRF. General Montgomery's statements reinforce the belief that heavy armor would have enhanced the QRF effectiveness based on mobility (speed), protection, and firepower.

On the other hand, the M1A1 tank has limitations in this environment. Weapon system elevation restrictions (+20 degrees) require the tank to maintain stand-off in order to engage targets on upper stories.<sup>95</sup> The tank's size makes traversing and movement difficult on narrow roads. Furthermore, during combat in an urban environment the tank will have to fight with the hatches closed, limiting visibility. This restriction makes the tank extremely vulnerable to anti-tank fire when not supported by infantry.

The mission in Bosnia has been relatively peaceful in comparison to Somalia. The IFOR established the zone of separation with little confrontation. The major force protection issues facing TF Eagle, the United States Army portion of IFOR (First Armored Division), were minefields and other unexploded ordnance littering the country side. These munitions had been on the ground for years. Weather and other environmental effects made detection and removal extremely dangerous. Moreover, this posed a significant threat to innocent civilians as well. Based on the General Framework Agreement for Peace (GFAP), the former warring factions retained the responsibility for obstacle removal. The TF Eagle tank force provided security and proofed minefield lanes after mine removal.

The M1A1 tank roller and plow assisted the former warring factions in proofing these minefields. This mission contributed to force as well as local population protection, thus reinforcing the principle of legitimacy. There were 3,738 reported

minefields in the Task Force Eagle area of operation. These minefields consisted of 14 different types of mines, manufactured in the Former Yugoslavia.<sup>96</sup> The First Brigade portion of Task Force Eagle received the requirement to oversee the removal of over 1,306 bunkers, 713 minefields, and 200 kilometers of trench lines.<sup>97</sup> The M1A1 tank roller and plow accomplished this mission with great success, even though the surface conditions and mine deterioration posed clearing problems. The tank roller proofed hard surface roads and the tank plow proofed unimproved surfaces. The M1A1 roller and plow attachment proved invaluable in mobility operations during this mission. The tank provided protection for the crew and the proof mission provided mobility protection for other forces and the local populous.

In fairness, there was also a few disadvantages. The main disadvantage concerns the tank's weight and maneuver damage potential. The 67 ton monster out weighs the capacity of most third world bridges. This limits route options and places extensive requirements on engineers to reinforce smaller bridges. The overall size and weight also creates the potential for maneuver damage to civilian property. In Somalia, the tank proved too big for some of the roads, often causing congestion and collateral damage to property.<sup>98</sup> This posed a problem in Bosnia as well. It is difficult to build legitimacy by destroying personal property and infrastructure.

### **Psychological Effect**

The heavy tank has a universal reputation for being one of the most powerful ground systems on the modern battlefield. Once deployed to an area of operation, the tank represents the United States commitment to security establishment, force protection,

and mission accomplishment. The physical features of the tank form a lasting impression on faction members and the local populace. Psychological effect impacts on the situation in two different ways. First, the psychological impact of having armor on the ground which deters aggression. Secondly, the impact it has during a fire fight. This section illustrates these influences in Bosnia and Somalia.

In Somalia, the Marines observed that the M1A1 tank displayed an intimidating appearance and created distinctive sounds which effectively deterred aggression by belligerent forces. These attributes provided a tremendous psychological advantage to light forces.<sup>99</sup> The physical intimidation and ability to intercede without firing, while being fired upon, diffused numerous situations without casualties. Firepower demonstrations and the ability to move at night under blackout conditions reinforced this perception. Shock effect proved critical during operations in MOUT, fighting at roadblocks, fixed site security, counter-sniper operations and convoy escorts.<sup>100</sup>

Additionally, the Marines observed that the Somalis treated the tank as a passive protector based on its ability to influence situations without using weapons. Major Campbell stated: "the result was not an escalation of violent attacks, but a decrease. The tank possessed armor for protection and did not have to resort to firepower for force protection."<sup>101</sup> This perception contributed to better relations between peace forces and Somalis. He continues, "This resulted in an exponential increase in the amount of restraint exhibited by the Task Force and a perceived increase in the legitimacy of our activities."<sup>102</sup>

Furthermore, during General Montgomery's congressional testimony, he mentioned the value of armor shock effect during combat. He stated, "[Armor provides] greater protection and greater shock power and effectiveness on the battlefield against other systems." The advantage created by the tanks ability to get into position and deliver an overwhelming volume of direct fire placed the peace enforcer at a psychological advantage over the opposing force. Had armor been present, this could have potentially shortened the fire fight with the Aideed militia.<sup>103</sup>

In Bosnia, M1A1 tanks contributed to an overwhelming show of force during initial and subsequent operations in Bosnia. The Center for Army Lessons Learned (CALL) *Initial Impressions Report* stated:

The first part of Operation Joint Endeavor entailed an overt show of overwhelming force to establish positional advantage, both physical and psychological, to maneuver against the faction forces in Bosnia. U.S. forces entering Bosnia were structured to present a show of force that would be powerful enough to convince the former warring factions to allow us to occupy lodgement areas and not oppose us in the enforcement of compliance with the GFAP. The massing of U.S. combat power, together with the flood crossing of the Sava River, overwhelmingly demonstrated the combat potential of maneuver forces should the opposing factions chose to resist the implementation plan. The massive effort to move military forces from their permanent bases, through staging areas, and into the theater of operations was intentionally conducted very openly. In Stability Operations conducted in Bosnia-Herzegovina, overt displays of combat potential and intent were a means of maneuvering to gain the military as well as political advantage.<sup>104</sup>

The bulk of this initial show of force rested on the M1A1 tanks of the First Armored Division (Old Ironsides). Media sources covered the tanks of 1-1 Cavalry crossing the Sava river as the initial forces entered Bosnia. These tanks continued to display an overt

and overwhelming show of force during the zone of separation (ZOS) establishment and enforcement.

The following passage from the article *Task Force Eagle's Armor and Cavalry Operations in Bosnia* highlights the reasons for sending tanks to Bosnia:

As the Germans found out in World War II, TF Eagle also knows that Bosnia is not ideal "tank country." However the decision to send the First Armored division to Bosnia, rather than an infantry of mechanized infantry division, has had a profound effect. The awesome presence of a reinforced armored division can leave little doubt in the minds of the Serbians, Croatians, and Bosnians that the United States and its NATO allies mean business in implementing the Dayton Agreement. A platoon of Abrams tanks and Bradley fighting vehicles at a checkpoint is a strong reminder of the hundreds more that are also quite visible in the camps of the First Armored Division.<sup>105</sup>

The mere presence of tanks alone serves as a psychological reminder to the former warring factions and local populace of the extent of the United States resolve.

Psychological influence may be one of the top considerations when determining whether to deploy tanks in peace operations. A small quantity, like the four Marine tanks of the 1<sup>st</sup> Tank Bn (FWD) in Mogadishu, may be sufficient to produce this effect. The presence and threat of employment alone may create the desired effect on belligerent parties. These considerations balanced with the perception of excessive force warrants strict analysis in force structure development.

### **Sustainment and Maintenance**

Sustainment and maintenance are key considerations when deploying the 65 ton tank into a peace operation. Due to the nature of OOTW, deployment constraints based on terms of reference and money, often result in a fairly austere support base. The

significant logistics tail associated with the M1A1 tank often impact on the consideration to exclude it from force structures. This was not a problem in Bosnia due to the deployment of the heavy division support assets associated with the DISCOM.

On the other hand, this heavy support base was not available to the 1<sup>st</sup> Marine Tank Battalion (FWD) in Mogadishu. Major Campbell stated the following in his after action report:

The logistics burdens placed upon a JTF during OOTW require that economy of force be considered early on during force tailoring. Tanks should not be discarded because of supply or support considerations. Sections and platoons of modern armor fighting vehicles are more dependable and easier to maintain than their predecessors. The four tanks patrolled eight to twelve hours daily and during nearly four months of continuous operations each tank drove over 2000 miles and accumulated over 250 engine operating hours; all within the most austere and abusive operating environment.<sup>106</sup>

This reliability emphasizes the durability of the tank but does not imply maintenance free operations. A detachment of M1A1 tanks requires a maintenance team and its ancillary test and lift equipment. This organization must be able to provide organizational and direct support maintenance to include periodic services.

The tank also uses unusually large amounts of fuel. The cruising range is 273 to 298 miles per tank on about 500 gallons of fuel. This number reflects a steady cruising rate which rarely occurs in actual operations. Short bursts of activity, maneuver, fighting and maintenance actually result in fuel consumption rates of 3 to 7 gallons per mile.<sup>107</sup>

The Class III source and support assets are vital to the logistics planning of heavy armor employment. Typically, a company of tanks requires two cargo and fuel trucks to sustain operations. Most peace operations forces operate from a base area which makes

transportation of Class III easier and in peace operations, food and water tend to be critical supplies, not fuel. Limiting tank activity to missions like QRF and fixed site security could further reduce fuel needs.

These maintenance and sustainment considerations are key when employing heavy armor whether it be five battalions in TF Eagle or four Marine tanks in Mogadishu. The bill to pay is well worth the services rendered. After all, four Marine tanks sufficiently supported over 4,000 light infantry forces during Operation Restore Hope.

### **Section V: Conclusion**

The past decade witnessed incredible change in the stability of the world. The end of the Cold War completely changed the face of conflict. The revitalization of the United Nations and the new leadership role of the United States increased the potential for military participation in peace operations. Since 1988, the number of peace operations has more than doubled and increased in complexity.

Based on the potential for conventional war; increasing probability for peace operations; and a shrinking defense budget, military and political leaders must purchase weapon systems capable of operating effectively in both environments. The versatility of the M1A1 Abrams Tank make it a weapon system of choice to support infantry forces. This paper illustrated the tanks utility in peace operations based on force protection and psychological effect.

Due to the unstable nature of peace operations, the ground commander must maintain a range of options necessary to respond to potential threats. These threats range from rock throwing to anti-tank fire. The M1A1 tank is a single platform that is



sufficiently versatile to cover this spectrum of violence. In one scenario it can receive fire without returning it, or engage a hostile threat with large volumes of machine gun and anti-armor fire as the situation dictates. Lieutenant General Gustav Hagglund, an experienced Finnish peace operations commander, stated, “It is not the kind of weapon, but there use that must be strictly limited. Without at least some available means there is no credibility in the battle of wills that peacekeeping often entails in a war zone.”<sup>108</sup> The heavy tank contributes to victory in the battle of wills. Victory being a stable environment with maximum force protection.

The development of a task organization sufficient to address this wide range of threats requires detailed analysis. Heavy armor belongs in peace operations, but this does not warrant deploying a tank division on every peace operation. Clearly, the bulk of the force structure belongs to the infantryman. However, in order to provide maximum force protection, armor must be included as a support weapon. The tank unit can be employed in sections (two tanks) to support infantry forces throughout the area of operation. Task Force Eagle in Bosnia (over 200 tanks) and the Marine tank detachment (four tanks) in Mogadishu during Operation Restore Hope illustrate the range of options available. Both these forces successfully conducted peace operations.

Lieutenant General Gustav Hagglund stated, “The more muscle shown, the more plausible are the excuses given to the violator to withdraw. The following rule applies: maximum show of force ensures best minimum use of weapons.”<sup>109</sup> The tanks presence represents deterrence based on a capability of maximum destruction. This capacity

coupled with maximum force protection solidifies it's position on the peace operations team.

## ENDNOTES

<sup>1</sup> Dick Cheney, *Defense Strategy for The 1990s: The Regional Defense Strategy*, (Department of Defense, January 1993), p. 2.

<sup>2</sup> Sir Alan Munro, "A New World Disorder? Crisis Management Post-Cold War," *The RUSI Journal*, February 1995, pp. 18-19.

<sup>3</sup> Jan Goldman, "A Changing World, A Changing UN," *Military Review*, Vol. LXXIV, No. 9, September 1994, p. 14.

<sup>4</sup> William Clinton, *A Time For Peace*, (Office of the President of The United States of America, February 1995), p. 9.

<sup>5</sup> Ibid., p. 5.

<sup>6</sup> Ibid., p. 15.

<sup>7</sup> Office of the Secretary of Defense, *National Security Strategy of the United States*, (Washington D.C., February 1995), pp. 1-3.

<sup>8</sup> Robert D. Kaplan, *The Ends of The Earth*, (New York, 1996), pp. 8-10.

<sup>9</sup> U.S. Army, *Field Manual 100-5, Operations*, (Washington D.C., June 1993), p. 13-0.

<sup>10</sup> Ibid., p. 13-1.

<sup>11</sup> U.S. Army, *Field Manual 100-23, Peace Operations*, (Washington D.C., December 1994), pp. 2-3.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid., pp. 4-6.

<sup>14</sup> Ibid.

<sup>15</sup> Center for Army Lessons Learned (CALL), *Operation Able Century Lessons Learned Report*, (Fort Leavenworth, KS, October 1994), p. iii. In early December 1992, the Secretary General of the United Nations recommended that peacekeepers be sent to Macedonia. Later that month, the UN Security Council adopted this recommendation

and published UN Security Council Resolution 795. The United States supported this mission with an infantry Task Force. It was the first proactive deployment of UN forces.

<sup>16</sup> *FM 100-23*, 1994, pp. 4-5.

<sup>17</sup> *Ibid.*, p. 5.

<sup>18</sup> LTG Sir Michael Rose, "A Year in Bosnia: What Has Been Achieved," *The RUSI Journal*, (June 1995), pp. 22-25.

<sup>19</sup> *FM 100-23*, 1994, p. 5.

<sup>20</sup> *Ibid.*

<sup>21</sup> *Ibid.*

<sup>22</sup> *Ibid.*, pp. 5-6.

<sup>23</sup> Joint Chiefs of Staff, *Joint Publication 3-07, Military Operations Other Than War*, (Washington, D.C., June 1995), pp. III-10.

<sup>24</sup> *FM 100-23*, 1994, pp. 6-7.

<sup>25</sup> *Ibid.*, p. 75.

<sup>26</sup> *Ibid.*, p. 7.

<sup>27</sup> *Ibid.*

<sup>28</sup> *Ibid.*, p. 8.

<sup>29</sup> Center for Army Lessons Learned (CALL), *Operation Restore Hope Lessons Learned Report*, (Fort Leavenworth, KS, May 1993), p. 2.

<sup>30</sup> *FM 100-23*, 1994, p. 8.

<sup>31</sup> *Joint Publication 3-07*, 1995, p. III-4. A joint force to include air and naval forces play an important role in sanction enforcement. Examples of enforcement of exclusive zones are Operation Southern Watch in Iraq, initiated in 1992, and Operation Deny Flight in Bosnia, initiated in 1993.

<sup>32</sup> *FM 100-23*, 1994, pp. 9-10.

<sup>33</sup> *Ibid.*, pp. 11-12.

<sup>34</sup> Ibid., p. 12.

<sup>35</sup> *Joint Publication 3-07*, 1995, p. II-1. These definitions are consistent between *Operations*, *Peace Operations* and *Joint Military Operations Other Than War* manuals.

<sup>36</sup> *FM 100-23*, 1994, pp. 15-16.

<sup>37</sup> *Joint Publication 3-07*, 1995, p. II-3.

<sup>38</sup> *FM 100-23*, 1994, p. 16.

<sup>39</sup> *FM 100-5*, 1993, p. 13-4.

<sup>40</sup> *FM 100-23*, 1994, pp. 16-17.

<sup>41</sup> *Joint Publication 3-07*, 1995, p. II-3.

<sup>42</sup> *FM 100-23*, 1994, pp. 17.

<sup>43</sup> *Joint Publication 3-07*, 1995, pp. 17-18.

<sup>44</sup> *FM 100-23*, 1994, p. 18.

<sup>45</sup> Ibid.

<sup>46</sup> Ibid.

<sup>47</sup> Kenneth Allard, *Somalia Operations: Lessons Learned*, (Washington, D.C., January 1995), p. 10.

<sup>48</sup> Ibid., pp. 10-12.

<sup>49</sup> Ibid., pp. 12-13.

<sup>50</sup> Ibid., p. 14.

<sup>51</sup> Ibid.

<sup>52</sup> CALL, *Operation Restore Hope Lessons Learned Report*, 1993, p. 2.

<sup>53</sup> Allard, p. 14.

<sup>54</sup> Ibid., p. 15.

- <sup>55</sup> CALL, *Operation Restore Hope Lessons Learned Report*, 1993, pp. 1-5.
- <sup>56</sup> Allard, pp. 15-16.
- <sup>57</sup> Ibid.
- <sup>58</sup> Ibid., p. 17.
- <sup>59</sup> CALL, *Operation Restore Hope Lessons Learned Report*, 1993, p. 3.
- <sup>60</sup> Allard, pp. 17-18.
- <sup>61</sup> CALL, *Operation Restore Hope Lessons Learned Report*, 1993, p. 4.
- <sup>62</sup> Allard, p. 17-18.
- <sup>63</sup> Ibid.
- <sup>64</sup> Ibid., p. 19.
- <sup>65</sup> United Nations Publication, "UNOSOM II Takes 'Decisive Action' to Restore Peace," *UN Chronicle*, September 1993, pp. 4-6.
- <sup>66</sup> Ibid.
- <sup>67</sup> Allard, p. 20.
- <sup>68</sup> Center for Army Lessons Learned (CALL), *Operations in Support of UNOSOM II Lessons Learned Report*, (Fort Leavenworth, KS, March 1994), p. 3.
- <sup>69</sup> Charles Lehner, "Task Force Eagle's Armor and Cavalry Operations in Bosnia," *Armor*, May-June 1996, p. 9.
- <sup>70</sup> Ibid., p. 9.
- <sup>71</sup> Center for Army Lessons Learned (CALL), *Operation Joint Endeavor Initial Impressions Report*, (Fort Leavenworth, KS, May 1996), p. ix.
- <sup>72</sup> Ibid., pp. ix-x.
- <sup>73</sup> Lehner, p. 9.

<sup>74</sup> Charles P. Ferry, "Mogadishu, October 1993: Personal Account of a Rifle Company XO," *Infantry*, September-October 1994, pp. 23-25.

<sup>75</sup> 7<sup>th</sup> Army Training Command, *Mission Training Plan for Stability Operations*, (USAREUR, June 1995), p. B5.

<sup>76</sup> Ibid.

<sup>77</sup> Ibid.

<sup>78</sup> Jefferson Panton, "Company Team Offensive Operations in Urban Terrain," *Armor*, November-December 1993, p. 23.

<sup>79</sup> John Campbell, "Mounted Forces' Role in OOTW," *U.S. Army Armor School Briefing*, July 1995, p. 2. MAJ Campbell (USMC), the Armor school MOOTW representative, delivered this briefing to the 1995/96 CGSC class. He was the commander of 1<sup>st</sup> Marine Corps Tank Battalion (FWD) during Operation Restore Hope in Somalia. His unit consisted of four M1A1 tanks and 1 M88A1 recovery vehicle.

<sup>80</sup> John F. Lynn, "Silent Knight: Fact and Fiction and The M1A1," *Marine Corps Gazette*, June 1990, p. 67.

<sup>81</sup> Campbell, p. 2.

<sup>82</sup> Ibid.

<sup>83</sup> Lawrence E. Casper, "Summary of Combat Operations," *Falcon Brigade, 10<sup>th</sup> Mountain Division After Action Review*, 3 October 1993, p. 1.

<sup>84</sup> Ferry, p. 26.

<sup>85</sup> Ibid.

<sup>86</sup> Ibid.

<sup>87</sup> Michael Ellerbe, "The Battle of 3 October Summary," *TF 2-14 IN After Action Report*, August 1993, p. 1.

<sup>88</sup> Ibid., p. 2.

<sup>89</sup> Ferry, p. 27.

<sup>90</sup> Ibid., p. 27.

- <sup>91</sup> Casper, p. 7.
- <sup>92</sup> Ellerbe, p. 3.
- <sup>93</sup> Congress, Senate, Committee on Armed Services, *U.S. Military Operations During U.N. Operation in Somalia II (UNOSOM II)*, 103<sup>rd</sup> Cong., 2<sup>nd</sup> sess., 12 May 1994, p. 53.
- <sup>94</sup> Ibid., p. 29.
- <sup>95</sup> Panton, pp. 22-23.
- <sup>96</sup> Center For Army Lessons Learned (CALL), *Drawing a Line in the Mud*, Newsletter No. 96-5, (Fort Leavenworth, KS, May 1996), p. C-1.
- <sup>97</sup> Ibid., p. v.
- <sup>98</sup> Campbell, p. 19.
- <sup>99</sup> Ibid., p. 16.
- <sup>100</sup> Ibid.
- <sup>101</sup> Campbell, p. 8.
- <sup>102</sup> Ibid.
- <sup>103</sup> Congress, Senate, Committee on Armed Services, *U.S. Military Operations During U.N. Operation in Somalia II (UNOSOM II)*, 103<sup>rd</sup> Cong., 2<sup>nd</sup> sess., 12 May 1994, p. 45.
- <sup>104</sup> CALL, *Operation Joint Endeavor Initial Impressions Report*, 1996, p. 128.
- <sup>105</sup> Lehner, p. 10.
- <sup>106</sup> Campbell, p. 8.
- <sup>107</sup> Lynn, p. 67.
- <sup>108</sup> Gustav Haggglund, "Peace-keeping in a Modern War Zone," *Survival*, Volume XXXII, Number 3, May/June 1990, p. 239.
- <sup>109</sup> Ibid.



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